



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,993	08/23/2000	Magnus Oberg	2466-69	3192

7590 06/04/2004

NIXON & VANDERHYE P.C.

8th Floor

1100 North Glebe Road

Arlington, VA 22201-4714

EXAMINER

TRAN, DZUNG D

ART UNIT

2633

PAPER NUMBER

22

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/643,993

Applicant(s)

OBERG ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-32 and 46-49 is/are allowed.
- 6) ☒ Claim(s) 33,34,36-45,50,51 and 53-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Specification***

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 33, 34, 36-45, 50, 51, 53-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 recites the limitations "each first optical switch" in line 13. There is insufficient antecedent basic for these limitations.

Claim 38 recites the limitations "the second position" in line 13, "the first optical switches" in lines 14-15. There is insufficient antecedent basic for these limitations.

Claim 50 recites the limitations "each first optical switch" in line 13. There is insufficient antecedent basic for these limitations.

Claim 55 recites the limitations "the second position" in line 13, "the first optical switches" in lines 13-15. There is insufficient antecedent basic for these limitations.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33, 34, 40, 42, 43, 45, 50, 51, 57, 59, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee U.S. patent no. 5,777,761 as it is understood in view of above 112 problems.

Fee in figure 1 clearly disclose an optical WDM network having at least two nodes (figure 1, elements 136a, 136b, ..136f) inter-connected by a bi-directional optical link (figure 3, elements 106a, 106b, 106c), at least one of the nodes comprising: at least two pairs of ordinary optical transmitters (figure 3, elements 112, 114, 116) and ordinary optical receivers (figure 3, elements 118, 120, 122), each pair including an ordinary optical transmitter and an ordinary optical receiver, and ordinary optical transmitter receiving electrical signals and converting the receive electrical signals to issue first optical signals and ordinary optical receiver receiving optical signals converting them to electrical signals (col. 4. lines 7-19), and spare optical transmitter tunable (figure3, elements 124), the spare transmitter arranged to issue the optical signal to the other node, if the ordinary optical transmitters fails (abstract, col. 3, lines 38-52). Fee differs from claims 33 and 50 of the present invention in that Fee does not specific disclose one spare optical transmitter arranged together with an ordinary optical transmitter in pair. However, Fee in col. 3, lines 55-58 clearly discloses that more than one protect facility includes a spare optical transmitter (124), Fee clearly suggests that more than one spare optical transmitter can be employed. Furthermore, Deacon from same field of endeavor, clearly teaches employing a plurality of spare optical transmitters (figures 11,

Art Unit: 2633

12, 13, col. 21, lines 963), therefore, if it is not inherent, it would be obvious that spare transmitter is arranged together with an ordinary optical transmitter in pair in order to replace a failed transmitter with the corresponding spare transmitter tunable so that the optical network can continue functioning despite the failure (col. 2, lines 28-37). In addition, providing additional spare transmitter is not thing more than just duplication of parts. It has been judicially determined that duplication of parts is not patentable, *St. Regis Paper Co. V. Bemis Co., Inc.*, 193 usPQ 8, 11 (7th cir. 1977).

Regarding claims 34 and 51, Fee further discloses an optical switch connected to an ordinary optical transmitter and a spare transmitter to forward optical signals from only one of the ordinary optical transmitter and a spare transmitter (figure 3, element 110).

Regarding claims 40 and 57, Fee further discloses all the receivers connected to a single demultiplexer (figure 3, element 132).

Regarding claims 42, 43, 45 and 59, 60 and 62, Fee further discloses a spare receiver (figure 3, element 126).

5. Claims 41, 44, 58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee U.S. patent no. 5,777,761 in view of Takehana et al. U.S. patent no. 6,081,359.

As per claims above, Fee disclose all the limitations except for a switch provided to conduct an optical from the demultiplexer to at most of the ordinary receivers. Takehana in figure 3 clearly disclose an optical WDM network having transmitting system and receiving system, wherein all the ordinary receivers (figure 3, elements 161, 16-2..16-n) connected to a single demultiplexer (figure 3, element 14), a switch provided to conduct

Art Unit: 2633

an optical from the demultiplexer to at most of the ordinary receivers (figure 3, element 42), this optical signal being in the same wavelength band as the optical signal issued by a spare transponder (figure 3, element 13-r). It would have been obvious to an artisan at the time of the invention was made to include the transmitting apparatus and receiving apparatus of Takehana in the system of Fee in order to obtain a reliability optical system.

### ***Conclusion***

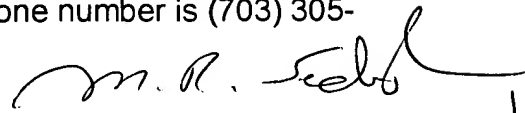
6. Claims 29-32 and 46-49 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
M.R. SEDIGHIAN  
Primary Examiner  
Art Unit: 2633